

**Title of Paper:** Facilitating Access to EOS Data at the NSIDC DAAC

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<http://nsidc.org/PROJECTS/HDFEOS/PHDIS.html>

<http://nsidc.org/PROJECTS/HDFEOS/MS2GT/>

**Abstract:** That National Snow and Ice Data Center has developed two tools to assist users in working with its data sets. The first, called the Polar HDF-EOS Data Imaging and Subsetting (PHDIS) Tool, can open any HDF-EOS gridded data product that is in the Lambert Azimuthal Equal Area (LAMAZ) projection, the basis of the Equal-Area Scalable Earth Grid (EASE-Grid) widely used for polar data products. The PHDIS Tool can also open and grid in LAMAZ any HDF-EOS swath data product. A simple and easy-to-use graphical user interface is used to open, geolocate, and create images from any number of swath or grid products in separate but dynamically linked windows. A box drawn in one window is simultaneously displayed in the other windows. Data within the box can be displayed in a new window, viewed in table format, or written to a file, for any of the data sets currently displayed. This tool provides an easy way for researchers to compare and analyze data from a variety of polar data sets.

The MODIS Swath-to-Grid Toolbox (MS2GT) is a set of software tools that can read HDF-EOS files containing MODIS swath data and produce flat binary files containing gridded data in any of a variety of map projections. Multiple input files corresponding to successively acquired 5 minute MODIS "scenes" can be processed together to produce a seamless output grid within a user-specified region. MS2GT can accept as input Level 1b radiance files, snow cover files, and sea ice files, and can optionally read MOD03 files for geolocation and/or ancillary data. A C program called fornav performs forward navigation to produce gridded flat binary files using either elliptical weighted averaging or elliptical maximum weight sampling.